Surabhi Gandhi
Jake Heck
Kevin Moen

Novel Wind Turbine
Advisor - Dr. Bei Gou
11/15/12

Parts ordered

- Solar Panel
- Wind turbine
- Sensors
- Fans
- Battery

In Progress

- Assembly of turbine
- Solar panel on the way
- Design fan control
- Design power controller
- Sensor application with Labview
- Wiki page
- Design of receiver

Completed

- Design turbine receiver in CAD

Where do we want to be? By the end of the semester we plan to have the wind turbine assembled and ready to test. We want to begin testing various pressure and wind speed sensors to find the best fit for our project. We want to have a final design proposed and a work order requested for the receiver so it can be back to us early next semester.

Obstacles faced. Our project began with a rocky start. It took a few weeks to convince Dr. Gou that we needed to do more than simply design his receiver, assemble, and test his design. After a few more meetings we came up with our most current game plan which is to design a system that can support a continuous drain of 150 watts from a deep cycle battery through the use of a wind turbine and a solar cell. Along with the design of this we also want to test whether or not the receiver on the turbine will be a cost effective way to increase the power output rather than switching to a larger sized turbine.

How will we meet our goals? In order to be where we want at the end of the semester we need

to get the turbine assembled and we need to begin testing with our array of sensors so we know what it is that we want to use by the end of this semester. We also need to get a good start on the design of our power controllers so that we can have them bread boarded by early next semester and begin testing to show proof of concept.